

Amendments to the Claims

Claim 1 (Currently amended) A solid reagent comprising an organic polymer base in which a graft polymer side chain is introduced onto the backbone of the organic polymer base and a reactive functional group is introduced onto the polymer side chain, wherein the solid reagent reacts stoichiometrically with a starting compound by contact with the starting compound to transfer the starting compound into a target organic compound.

Claim 2 (Original) The solid reagent of claim 1 wherein the organic polymer base is in the form of a fiber, a woven or nonwoven fabric consisting of an assembly of fibers, a porous membrane or a hollow fiber membrane.

Claim 3 (Previously presented) The solid reagent of claim 1 wherein the graft polymer side chain is introduced via a radiation-induced graft polymerization.

Claim 4 (Previously presented) The solid reagent of claim 1 wherein the reactive functional group serves as a reagent for any one of oxidation reaction, reduction reaction, deprotonation reaction, halogenation reaction or nucleophilic replacement reaction.

Claim 5 (Previously presented) A process for preparing a solid reagent of claim 1, comprising graft-polymerizing a polymerizable monomer having a reactive functional group onto the backbone of an organic polymer base to form a polymer side chain having the reactive functional group.

Claim 6 (Previously presented) A process for preparing a solid reagent of claim 1, comprising graft-polymerizing a polymerizable monomer having a group capable of being converted into a reactive functional group onto the backbone of an organic polymer base to form

a polymer side chain and then converting the group capable of being converted into a reactive functional group on the polymer side chain into the reactive functional group.

Claim 7 (Previously presented) The process of claim 5 wherein the graft polymerization is conducted via a radiation-induced graft polymerization.

Claim 8 (Withdrawn) A process for synthesizing an organic compound, comprising bringing a starting compound into contact with a solid reagent of claim 1.

Claim 9 (Withdrawn) A multistage process for synthesizing an organic compound, comprising preparing a plurality of solid reagents of claim 1 having different functions and successively bringing a starting compound into contact with the plurality of solid reagents prepared.

Claim 10 (Withdrawn) An apparatus for synthesizing an organic compound, comprising a reaction column packed with a solid reagent of claim 1; a material feeding section for feeding a starting compound to the reaction column; and a product recovery section for recovering the organic compound produced from the reaction column.

Claim 11 (Withdrawn) A multistage apparatus for synthesizing an organic compound, comprising a plurality of reaction columns packed with a plurality of solid reagents of claim 1 having different functions; column connecting sections for connecting the plurality of reaction columns in series; a material feeding section for feeding a starting compound to the first one of the reaction columns connected in series; and a product recovery section for recovering the organic compound produced from the last reaction column.

Claim 12 (Previously presented) The solid reagent of claim 2 wherein the graft polymer side chain is introduced via a radiation-induced graft polymerization.

Claim 13 (Previously presented) The solid reagent of claim 2 wherein the reactive functional group serves as a reagent for any one of oxidation reaction, reduction reaction, deprotonation reaction, halogenation reaction or nucleophilic replacement reaction.

Claim 14 (Previously presented) The solid reagent of claim 3 wherein the reactive functional group serves as a reagent for any one of oxidation reaction, reduction reaction, deprotonation reaction, halogenation reaction or nucleophilic replacement reaction.

Claim 15 (Previously presented) A process for preparing a solid reagent of claim 2, comprising graft-polymerizing a polymerizable monomer having a reactive functional group onto the backbone of an organic polymer base to form a polymer side chain having the reactive functional group.

Claim 16 (Previously presented) A process for preparing a solid reagent of claim 3, comprising graft-polymerizing a polymerizable monomer having a reactive functional group onto the backbone of an organic polymer base to form a polymer side chain having the reactive functional group.

Claim 17 (Previously presented) A process for preparing a solid reagent of claim 4, comprising graft-polymerizing a polymerizable monomer having a reactive functional group onto the backbone of an organic polymer base to form a polymer side chain having the reactive functional group.

Claim 18 (Previously presented) A process for preparing a solid reagent of claim 2, comprising graft-polymerizing a polymerizable monomer having a group capable of being converted into a reactive functional group onto the backbone of an organic polymer base to form a polymer side chain and then converting the group capable of being converted into a reactive functional group on the polymer side chain into the reactive functional group.

Claim 19 (Previously presented) A process for preparing a solid reagent of claim 3, comprising graft-polymerizing a polymerizable monomer having a group capable of being converted into a reactive functional group onto the backbone of an organic polymer base to form a polymer side chain and then converting the group capable of being converted into a reactive functional group on the polymer side chain into the reactive functional group.

Claim 20 (Previously presented) A process for preparing a solid reagent of claim 4, comprising graft-polymerizing a polymerizable monomer having a group capable of being converted into a reactive functional group onto the backbone of an organic polymer base to form a polymer side chain and then converting the group capable of being converted into a reactive functional group on the polymer side chain into the reactive functional group.

Claim 21 (Previously presented) The process of claim 6 wherein the graft polymerization is conducted via a radiation-induced graft polymerization.

Claim 22 (Withdrawn) A process for synthesizing an organic compound, comprising bringing a starting compound into contact with a solid reagent of claim 2.

Claim 23 (Withdrawn) A process for synthesizing an organic compound, comprising bringing a starting compound into contact with a solid reagent of claim 3.

Claim 24 (Withdrawn) A process for synthesizing an organic compound, comprising bringing a starting compound into contact with a solid reagent of claim 4.

Claim 25 (Withdrawn) A multistage process for synthesizing an organic compound, comprising preparing a plurality of solid reagents of claim 2 having different functions and successively bringing a starting compound into contact with the plurality of solid reagents prepared.

Claim 26 (Withdrawn) A multistage process for synthesizing an organic compound, comprising preparing a plurality of solid reagents of claim 3 having different functions and successively bringing a starting compound into contact with the plurality of solid reagents prepared.

Claim 27 (Withdrawn) A multistage process for synthesizing an organic compound, comprising preparing a plurality of solid reagents of claim 4 having different functions and successively bringing a starting compound into contact with the plurality of solid reagents prepared.

Claim 28 (Withdrawn) An apparatus for synthesizing an organic compound, comprising a reaction column packed with a solid reagent of claim 2; a material feeding section for feeding a starting compound to the reaction column; and a product recovery section for recovering the organic compound produced from the reaction column.

Claim 29 (Withdrawn) An apparatus for synthesizing an organic compound, comprising a reaction column packed with a solid reagent of claim 3; a material feeding section for feeding a starting compound to the reaction column; and a product recovery section for recovering the organic compound produced from the reaction column.

Claim 30 (Withdrawn) An apparatus for synthesizing an organic compound, comprising a reaction column packed with a solid reagent of claim 4; a material feeding section for feeding a starting compound to the reaction column; and a product recovery section for recovering the organic compound produced from the reaction column.

Claim 31 (Withdrawn) A multistage apparatus for synthesizing an organic compound, comprising a plurality of reaction columns packed with a plurality of solid reagents of claim 2 having different functions; column connecting sections for connecting the plurality of

reaction columns in series; a material feeding section for feeding a starting compound to the first one of the reaction columns connected in series; and a product recovery section for recovering the organic compound produced from the last reaction column.

Claim 32 (Withdrawn) A multistage apparatus for synthesizing an organic compound, comprising a plurality of reaction columns packed with a plurality of solid reagents of claim 3 having different functions; column connecting sections for connecting the plurality of reaction columns in series; a material feeding section for feeding a starting compound to the first one of the reaction columns connected in series; and a product recovery section for recovering the organic compound produced from the last reaction column.

Claim 33 (Withdrawn) A multistage apparatus for synthesizing an organic compound, comprising a plurality of reaction columns packed with a plurality of solid reagents of claim 4 having different functions; column connecting sections for connecting the plurality of reaction columns in series; a material feeding section for feeding a starting compound to the first one of the reaction columns connected in series; and a product recovery section for recovering the organic compound produced from the last reaction column.

Claim 34 (New) The solid reagent of claim 1 wherein the solid reagent is consumed along the progress of the reaction to undergo changes in functional groups and thus lose reactivity as a reagent, and wherein the solid reagent may recover its reactivity by restoring the functional groups with a regenerant.